

PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Aslan et al. Examiner: Lydia De Jesus
Application No.: 10/051,332 Group Art Unit: 2859
Filed: January 1, 2002 Docket No.: 50019.81USU1/PO5006
Title: TIME-INTERLEAVED SAMPLING OF VOLTAGES FOR IMPROVING
ACCURACY OF TEMPERATURE REMOTE SENSORS

CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

National Semiconductor Corporation, a corporation organized and existing under the laws of the State of Delaware, having a place of business at 2900 Semiconductor Drive, Santa Clara, California 95051-8090, certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

A. An assignment from the inventor(s), of the patent application identified above. The assignment was recorded in the Patent and Trademark Office on January 16, 2002, at Reel 012516, Frame(s) 0164, of which a copy is attached.

B. A chain of title from the inventor(s) of the patent application identified above to the current assignee as shown below:

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Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

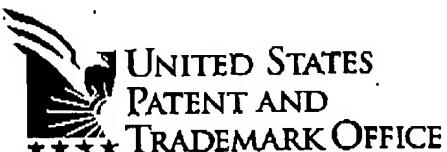
I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(206) 342.6200

Date: May 16, 2004

Mark R. Hennings, Esq.
Reg. No. 48,982



MARCH 26, 2002

PTAS

Chief Information Officer
Washington, DC 20231
www.uspto.gov

MERCHANT & GOULD P.C.
MARK R. HENNINGS
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903



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UNITED STATES PATENT AND TRADEMARK OFFICE
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RECORDATION DATE: 01/16/2002

REEL/FRAME: 012516/0164
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNEE'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNEE:
ASLAN, MEHMET

DOC DATE: 12/21/2001

ASSIGNEE:
HENDERSON, RICHARD DEAN

DOC DATE: 12/21/2001

ASSIGNEE:
WONG, MICHAEL

DOC DATE: 12/21/2001

ASSIGNEE:
REN, QING-FENG

DOC DATE: 12/21/2001

ASSIGNEE:
NG, CHUNGWAI BENEDICT

DOC DATE: 12/21/2001

ASSIGNEE:
OSHIMA, HIDEYA

DOC DATE: 12/21/2001

ASSIGNEE:
NATIONAL SEMICONDUCTOR CORPORATION
2900 SEMICONDUCTOR DRIVE
SANTA CLARA, CALIFORNIA 95051-8090

MAR-16-04 17:40 FROM-MERCHANT & GOULD P.C.

206-342-6201

T-086 P.020/026 F-275

012516/0164 PAGE 2

SERIAL NUMBER: 10051332
PATENT NUMBER:

FILING DATE: 01/16/2002
ISSUE DATE:

JEEVON JONES, EXAMINER
ASSIGNMENT DIVISION
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206-342-6201

T-086 P.021/026 F-275

01-31-2002

FORM PTO-1595

(Rev. 6-93)

OMB No. 0651-0011 (exp. 4/94)
M&G 40019.81USU1/P05006

RE

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

101967094

PTO



To the Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

1) Mehmet Aslan 6) Hideya Oshima
 2) Richard Dean Henderson
 3) Michael Wong
 4) Qing-Feng Ren
 5) Chungwai Benedict Ng

2. Name and address of receiving party(ies):

NATIONAL SEMICONDUCTOR CORPORATION
 2900 SEMICONDUCTOR DRIVE
 SANTA CLARA, CA 95051-8090

Additional name(s) of conveying party(ies) attached? Yes NoAdditional name(s) & address(es) attached? Yes No

3. Nature of conveyance:

Assignment Merger
 Security Agreement Change of Name
 Other:

Execution Date: December 21, 2001

4. Application number(s) or patent number(s):

This document is being filed together with a new application, filed January 16, 2002.

A. Patent Application No.(s)

B. Patent No.(s)

10/651332

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Mark R. Hennings
 Address: Merchant & Gould P.C.
 P.O. Box 2903
 Minneapolis, MN 55402-0903

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$40.00

Enclosed
 Authorized to be charged to deposit account

8. Please charge any additional fees or credit any overpayments to our Deposit account number: 13-2725

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9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Mark R. Hennings, Reg. No. 48,982

Name of Person Signing

January 16, 2002

Date

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01/31/2002 6TOM11 00000027 10051332

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M&G 50019.81USU1/P05006

ASSIGNMENT

WHEREAS, we, Mehmet Aslan, residing at 1765 View Drive, Milpitas, California 95035, Richard Dean Henderson, residing at 215 Bartlett Avenue, Sunnyvale, California 94086, Michael Wong, residing at 444 Saratoga Avenue, Santa Clara, California 95050, Qing-Feng Ren, residing at 3414 Cardoza Ct., San Jose, California 95132, Chungwai Benedict Ng, residing at 166 Paseo Ct., Mountain View, California 94043, and Hideya Oshima, residing at 3655 Pruneridge Street, Santa Clara, California 95051 made certain new and useful inventions and improvements as described and claimed in the specification forming part of an application for Letters Patent of the United States executed herewith, which is entitled **TIME-INTERLEAVED SAMPLING OF VOLTAGES FOR IMPROVING ACCURACY OF TEMPERATURE REMOTE SENSORS.**

AND WHEREAS, National Semiconductor Corporation, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 2900 Semiconductor Drive, Santa Clara, California 95051-8090 (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said

improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 day of
DECEMBER, 2001.

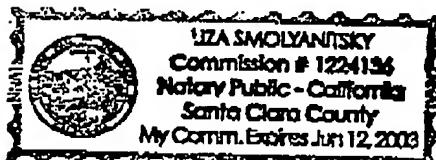
Mehmet A
 Mehmet Aslan

STATE OF California
 COUNTY OF Santa Clara

On this 21 day of December, 2001, before me personally appeared Mehmet Aslan to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.

[SEAL]

Liza Smolyanitsky
 Notary Public



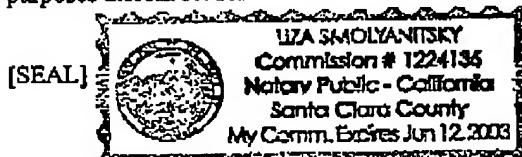
IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 day of
DECEMBER, 2001.



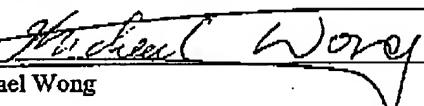
Richard Dean Henderson

STATE OF California
 COUNTY OF Santa Clara

On this 21 day of December, 2001, before me personally appeared Richard Dean Henderson to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.




IN TESTIMONY WHEREOF, I have hereunto set my hand this 21st day of
December, 2001.



Michael Wong

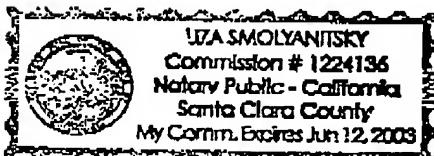
STATE OF California
 COUNTY OF Santa Clara

On this 21 day of December, 2001, before me personally appeared Michael Wong to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.

[SEAL]



Notary Public

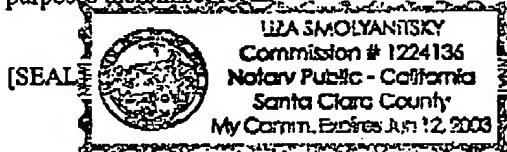


IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 day of
December, 2001.

C3 - f 2
 Qing-Feng Ren

STATE OF California
 COUNTY OF Santa Clara

On this 21 day of December, 2001, before me personally appeared Qing-Feng Ren to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.



Liza Smolyansky
 Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this 21st day of
December, 2001.

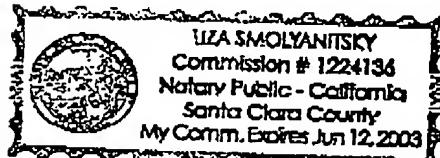
Benedict D. Ng
 Chungwai Benedict Ng

STATE OF California
 COUNTY OF Santa Clara

On this 21 day of December, 2001, before me personally appeared Chungwai Benedict Ng to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.

[SEAL]

Liza Smolyansky
 Notary Public



MAR-16-04

17:41

FROM-MERCHANT & GOULD P.C.

206-342-6201

T-086 P.026/026 F-275

IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 day of
December, 2001.



Hideya Oshima

STATE OF California
COUNTY OF Santa Clara ss

On this 21 day of December, 2001, before me personally appeared Hideya Oshima to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.

[SEAL]


Notary Public



THE STATEMENT BELOW IS FOR OFFICE USE ONLY

In accordance with the decision granting the petition filed on _____, _____
this terminal disclaimer is accepted. The period of patent lapse specified above has been
accepted as equivalent to _____ -0- months.

Petitions Examiner